110. The method of claim 106 wherein the lower cladding is heat treated in situ following deposition thereof.

111. The method of claim 110 wherein the upper cladding is heat treated in situ following deposition thereof.

112. The method of claim 106 wherein the core is heat treated in situ following deposition thereof.

113. The method of claim 108 further comprising depositing an encapsulation layer over the upper cladding.

REMARKS

This is intended as a full and complete response to the Office Action dated December 31, 2002, having a shortened statutory period for response set to expire on January 31, 2003. Please reconsider the claims pending in the application for reasons discussed below.

I. Claims 1-89 and 98-113, drawn to process, classified in class 216, subclass 24.
II. Claims 89-97, drawn to apparatus, classified in class 156, subclass 345.

Applicants elect claims 1-89 and 98-113, Group I, with traverse. The Examiner asserts that the process as claimed can be practiced by another and materially different apparatus, such as by using an apparatus without having a robot in the transfer chamber.

The apparatus claims of Group II, claims 89-97, as amended, recite an apparatus having a transfer chamber, one or more deposition chambers connected to the transfer chamber, the deposition chambers selected from the group of a USG chamber, a PSG chamber, and a BPSG chamber, and at least one densification chamber connected to

the transfer chamber. The basis for restriction of the claims of Group II from Group I has been obviated.

Applicants respectfully request withdrawal or modification of the restriction requirement to permit prosecution of claims 1-113.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

32. (Amended) The method of claim 31 wherein the [panel] substrate comprises a material selected from quartz, silica, or fused silica.

71. (Amended) A method of fabricating multiple optical devices on a [substrate] glass panel, comprising:

positioning a [substrate] glass panel in a first processing chamber;

depositing a lower cladding on the glass panel;

densifying the deposited lower cladding;

positioning the glass panel in a second processing chamber;

depositing a core layer on the lower cladding;

patterning and etching the core layer to define a pattern of optical devices;

positioning the glass panel in a third processing chamber; and

depositing an upper cladding over the patterned optical devices.

73. (Amended) The method of claim 71 wherein the [rectangular] glass panel defines one or more die and the die have one or more optical devices formed thereon and further have a major dimension greater than a minor dimension.

80. (Amended) The method of claim 71 wherein the [rectangular] glass panel is 400mm by 500mm.

81. (Amended) The method of claim 71 wherein the [rectangular] glass panel has an area of about 400cm^2 or greater.

82. (Amended) The method of claim 71 wherein the [rectangular] glass panel is a TFT panel.

83. (Amended) The method of claim 71 wherein the [rectangular] glass panel is made of a material selected from the group of quartz, silica, fused silica or combinations thereof.

89. (Amended) A processing system for fabricating optical devices, comprising:

a transfer chamber [having a robot disposed therein];

one or more deposition chambers connected to the transfer chamber, the deposition chambers selected from the group of a USG chamber, a PSG chamber, and a BPSG chamber; and

at least one densification chamber connected to the transfer chamber.

97. (Amended) The processing system of claim 94 wherein the processing system is adapted to process substrates having an area of at least about 400cm^2. [.]